

## A B S T R A C T

A device for thermally insulating at least one undersea pipe (1), the device comprising:

5       • a thermally insulating covering (3<sub>1</sub>, 3<sub>3</sub>) surrounding said pipe(s);

      • said covering itself being covered by an outer leakproof protective case (2), and said case (2) being made of a flexible or semirigid material suitable for  
10 remaining in contact with the outside surface of said insulating covering (3) when it deforms,

      the device being characterized in that:

      • said insulating covering comprises a phase-change material (3<sub>1</sub>) confined in at least one container (3<sub>2</sub>) made  
15 of a flexible or semirigid material that is deformable;  
and

      • said container(s) (3<sub>2</sub>) being disposed around said pipe(s) (1).